SUPPORTING STATEMENT FOR INFORMATION COLLECTION REQUEST NUMBER 2421.01, "CONDITIONAL EXEMPTION FROM RCRA DEFINITION OF HAZARDOUS WASTE FOR CARBON DIOXIDE STREAMS INJECTED INTO CLASS VI UIC WELLS – PROPOSED RULE"

October 28, 2010

TABLE OF CONTENTS

1.	IDEN	ITIFICATION OF THE INFORMATION COLLECTION	1
	1(a)	Title and Number of the Information Collection	1
	1(b)	Short Characterization or Abstract	1
2.	NEEI	D FOR AND USE OF THE COLLECTION	2
	2(a)	Need and Authority for the Collection	2
	2(b)	Practical Utility and Users of the Data	
3.		DUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA	
	3(a)	Nonduplication	3
	3(b)	Public Notice	3
	3(c)	Consultations	4
	3(d)	Effects of Less Frequent Collection	4
	3(e)	General Guidelines	4
	3(f)	Confidentiality	4
	3(g)	Sensitive Questions	4
4.	THE	RESPONDENTS AND THE INFORMATION REQUESTED	4
	4(a)	Respondents and NAICS Codes	4
	4(b)	Information Requested	5
5.	THE	INFORMATION COLLECTED, AGENCY ACTIVITIES, COLLECTION	
	MET	HODOLOGY, AND INFORMATION MANAGEMENT	6
	5(a)	Agency Activities	6
	5(b)	Collection Methodology and Management	7
	5(c)	Small Entity Flexibility	
	5(d)	Collection Schedule	7
6.	ESTI	MATING THE ANNUAL HOUR AND COST OF THE COLLECTION	7
	6(a)	Estimating Respondent Hours	7
	6(b)	Estimating Respondent Costs	7
	6(c)	Estimating Agency Hours and Costs	9
	6(d)	Estimating the Respondent Universe	9
	6(e)	Bottom Line Burden Hours and Cost Tables	
	6(f)	Reasons for Change in Burden	17
	6(g)	Burden Statement	

1. IDENTIFICATION OF THE INFORMATION COLLECTION

1(a) Title and Number of the Information Collection

This ICR is titled, "Conditional Exemption from RCRA Definition of Hazardous Waste for Carbon Dioxide Streams Injected into Class VI UIC Wells – Proposed Rule," ICR Number 2421.01.

1(b) Short Characterization or Abstract

Under the authority of the Resource Conservation and Recovery Act (RCRA), the U.S. Environmental Protection Agency (EPA) is proposing a conditional exemption from the definition of hazardous waste for carbon dioxide (CO_2) streams that are captured, stored, transported, and injected into a well subject to the requirements for Class VI Underground Injection Control (UIC) wells, including the requirements in 40 CFR Parts 144 and 146 of the Underground Injection Control Program of the Safe Drinking Water Act. The exemption would only apply to the CO_2 stream itself (as defined in 40 CFR 146.81(d)), and would not apply to hazardous wastes that are mixed with, or are otherwise co-injected with, CO_2 streams. The exemption would be codified at 40 CFR 261.4(h).

The conditional exemption would require generators and owner/operators of a Class VI UIC well who claim that a CO₂ stream is exempt under section 261.4(h), to have an authorized representative sign a certification statement worded as specified. The signed certification statement must be kept on site for no less than three years. The signed certification, which must be made available within 72 hours of a written request from EPA, must be renewed every year that the generator and Class VI UIC well owner/operator claim the exemption in section 261.4(h).

EPA is taking this action to support its efforts to encourage the use of carbon capture and sequestration (CCS) technologies to reduce the levels of greenhouse gases emitted to the atmosphere.² In 2008, EPA proposed amendments to the UIC program to establish a new type of well (Class VI) to cover the underground injection of CO2 for the purposes of geological sequestration (July 25, 2008; 73 FR 43492).³ These UIC amendments would address the unique nature of geological sequestration projects to ensure that the injection of large volumes of CO₂ in geological formations for the purposes of long term storage would not endanger underground sources of drinking water. The UIC amendments would prohibit the injection of RCRA hazardous waste into Class VI wells.

Public comments on the proposed UIC amendments raised questions and concerns about the status of CO₂ as a RCRA hazardous waste. The proposed RCRA conditional exemption

¹ As discussed below, EPA proposed to establish Class VI wells in 2008 as a new type of well for the underground injection of CO₂. EPA is now considering public comments and options for addressing them.

² CO₂ is captured by fossil fuel power plants and other industrial processes.

³ Geological sequestration means the long-term containment of a gaseous, liquid or supercritical carbon dioxide stream in subsurface geologic formations. This term does not apply to its capture or transport.

would clarify that captured CO₂ would not be RCRA hazardous provided that the generator and Class VI UIC well owner/operator claim the exemption and comply with its conditions. In this respect, the proposed RCRA conditional exemption is necessary for clarifying the status of the captured CO₂ stream under RCRA and encouraging the capture and sequestration of CO₂ in Class VI wells in accordance with the proposed UIC amendments.

EPA believes that the risk posed to human health and the environment from the management of CO₂ streams is not substantial when these streams are managed for purposes of geological sequestration under the proposed RCRA conditional exemption, including compliance with regulations governing the storage, transport and injection into UIC Class VI permitted wells. EPA believes that the full set of hazardous waste regulations is in many ways inappropriate for these CO₂ streams and the proposed conditional exemption would substantially reduce the uncertainty associated with managing the streams under the hazardous waste regulations.

This ICR examines the information collections under the proposed RCRA conditional exemption at 40 CFR 261.4(h). Sections 1 through 5 of this document describe the collections (e.g., from the standpoint of need and use/utility of the information collected). The sections also describe respondent and Agency activities. In Section 6, EPA estimates the total annual hour and cost burden to respondents and the Agency under the information collections.

2. NEED FOR AND USE OF THE COLLECTION

2(a) Need and Authority for the Collection

The conditional exemption is being proposed under the authority of sections 2002, 3001, 3002, 3003, 3004, and 3007 of RCRA, as amended. EPA believes that the proposal is an important part of its efforts to establish a regulatory framework that supports the future development and deployment of carbon capture and sequestration (CCS) technology, to control the levels of greenhouse gases (GHGs) in the atmosphere.⁴

The certification statements required by the conditional exemption are necessary to hold claimants accountable for knowing and following the conditions of the exemption. They also are necessary to demonstrate to regulators that claimants are aware of the conditions applicable to them (e.g., during an onsite inspection). In addition, the certification statements help to convey the seriousness of the conditions to claimants and likely would encourage employees to make their upper management aware of the conditions and involve them in ensuring that their company remains in compliance.

⁴ Other recent EPA rules related to this strategy include EPA's proposed Federal Requirements under the Underground Injection Control (UIC) Program for Carbon Dioxide Geological Sequestration Wells (July 25, 2008; 73 FR 43492) and Mandatory Reporting of Greenhouse Gases: Injection and Geological Sequestration of Carbon Dioxide (October 30, 2009; 74 FR 56260).

2(b) Practical Utility and Users of the Data

The certification statements required by the conditional exemption would be used by regulators to hold generators and Class VI well owner/operators accountable for knowing the conditions applicable to them (e.g., during an onsite inspection). The certification statements also would be used by generators and owner/operators to demonstrate that they are aware of, and complying with, the conditions.

EPA believes the certifications are a practical way to assure compliance because they hold a single person at each facility accountable for compliance (i.e., the authorized representative). Because of this, the representative has a personal incentive to make sure that the facility complies with the conditions. The rule requires that the certification be updated annually to ensure that the facilities are reminded regularly of the applicable conditions and that the person chosen to be the authorized representative is a current employee.

3. NONDUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA

3(a) Nonduplication

The information collected under this ICR is not available from any source other than respondents. No other Federal agency or department collects this information.

3(b) Public Notice

As part of the Federal Register notice on the proposed regulation, EPA is soliciting comments on this information collection and the estimates in this ICR. EPA will solicit comments on specific aspects of the proposed information collection, as described below:

- 1) Whether the proposed collection of information is necessary for the proper performance of the functions of the Agency, including whether the information will have practical utility;
- 2) Whether the Agency's burden estimate is accurate including the validity of the methodology and assumptions used;
- 3) How to enhance the quality, utility, and clarity of the information to be collected; and
- 4) How to minimize the burden on respondents, including use of appropriate automated electronic, mechanical, or other technological collection techniques or other forms of information technology.

3(c) Consultations

In its efforts to develop its UIC regulatory amendments, RCRA proposed rule, and other rules applicable to UIC wells, EPA has performed a significant amount of research, analysis, and outreach to the regulated industry. The estimates in the ICR reflect the data and assumptions that EPA has developed based on this outreach and analysis.

3(d) Effects of Less Frequent Collection

The certification statements must be prepared when the generator and Class VI well owner/operator claim the exemption and renewed every year that the exemption is claimed. EPA believes this frequency is essential to ensure that the facilities are reminded regularly of the conditions applicable to them. If EPA does not require an annual renewal, it is possible that the facility could forget about the conditions, particularly as a result of employee turnover. In addition, the requirement for an annual renewal helps to ensure that the person chosen to be the authorized representative is currently employed by that organization.

In addition, the signed certification must be made available within 72 hours of a written request from EPA. The certification is submitted only when requested (e.g., one-time basis) and therefore is not submitted according to a specified frequency.

3(e) General Guidelines

Information collections performed under this clearance will follow all of OMB's General Guidelines regarding data collection.

3(f) Confidentiality

EPA does not expect to receive any claim of confidential business information. The certification statements include only boilerplate language that does not involve any confidential information.

3(g) Sensitive Questions

No questions of a sensitive nature would be asked of participants.

4. THE RESPONDENTS AND THE INFORMATION REQUESTED

4(a) Respondents and NAICS Codes

Table 1 presents the North American Industrial Classification System (NAICS) codes that may be affected by information collections in this ICR.

Table 1. North American Industrial Classification System (NAICS) Codes

NAICS Codes	Description
21	Mining
22	Utilities
31-33	Manufacturing
48-49	Transportation
56	Administrative and Support and Waste Management and Remediation Services
92	Public Administration

4(b) Information Requested

(1) Private Sector Organizations

EPA is proposing a conditional exemption from the definition of hazardous waste for carbon dioxide (CO_2) streams that are captured, stored, transported, and injected into a well subject to the requirements for Class VI Underground Injection Control (UIC) wells, including the requirements in 40 CFR Parts 144 and 146 of the Underground Injection Control Program of the Safe Drinking Water Act. The exemption would only apply to the CO_2 stream itself (as defined in 40 CFR 146.81(d)), and would not apply to hazardous wastes that are mixed with, or are otherwise co-injected with, CO_2 streams. The exemption would be codified at 40 CFR 261.4(h).

The conditional exemption would require any generator (person or persons, by site, who capture the carbon dioxide for eventual injection into a Class VI Underground Injection Control well) and any owner/operator of a Class VI UIC well who claim that a CO₂ stream is exempt under section 261.4(h) to have an authorized representative sign a certification statement worded as specified. The signed certification statement must be kept on site for no less than three years. The signed certification, which must be made available within 72 hours of a written request from EPA, should be renewed every year by anyone claiming the exemption in section 261.4(h).

(i) Data Item

• A signed certification statement from the generator and Class VI UIC well owner/operator that is worded as follows: "I certify under penalty of law that the carbon dioxide stream that I am claiming to be exempt under 40 CFR 261.4(h) meets all of the conditions set forth in that paragraph, including the condition that no hazardous wastes are mixed with, or are otherwise co-injected with, the carbon dioxide stream, and that the carbon dioxide stream is injected into a well subject to the requirements for the Class VI Underground Injection Control Program of the Safe Drinking Water Act."

(ii) Respondent Activities

- Generators and Class VI UIC well owner/operators claiming the exemption must perform the following:
 - Prepare the certification that is signed by the authorized representative and keep it onsite for no less than three years;
 - Renew the certification every year the exemption is claimed; and
 - Make the certification available to EPA or state if requested.

(2) State Governments

Authorized states may provide a written request to generators or Class VI UIC well owner/operators asking for a copy of the signed certification.

(i) Data Item

• Written request for a signed certification.

(ii) Respondent Activities

- Authorized states may perform the following:
 - Prepare and transmit a written request to generators or Class VI UIC well owner/operators requesting a copy of their signed certification; and
 - Receive, review and file the signed certifications.

5. THE INFORMATION COLLECTED, AGENCY ACTIVITIES, COLLECTION METHODOLOGY, AND INFORMATION MANAGEMENT

5(a) Agency Activities

EPA may perform the following:

- Prepare and transmit a written request to generators or Class VI UIC well owner/operators requesting a copy of their signed certification; and
- Receive, review and file the signed certifications.

5(b) Collection Methodology and Management

EPA will review and file the certification statements received from generators and Class VI UIC well owner/operators.

5(c) Small Entity Flexibility

The conditional exemption is optional and will only be claimed if generators and Class VI UIC well owner/operators find that the exemption is in their best interest. EPA believes that the conditional exemption would reduce the burden for generators and owner/operators, regardless of size, because they would no longer be required to comply with the existing RCRA hazardous waste regulations for the exempted CO₂ stream.

5(d) Collection Schedule

Following is the rule's collection schedule:

- Generators and Class VI UIC well owner/operators that claim the exemption must sign a certification statement attesting to their compliance with the conditions and keep it onsite for three years.
- The signed certification must be renewed each year that the exemption is claimed.
- The signed certification must be made available within 72 hours of a written request from EPA.

6. ESTIMATING THE ANNUAL HOUR AND COST OF THE COLLECTION

6(a) Estimating Respondent Hours

Exhibit 1 estimates annual burden hours for private sector organizations under the proposed rule. Exhibit 2 estimates annual burden hours for state governments under the proposed rule. Exhibit 3 presents the total annual burden to the private sector and state governments under the proposed rule. Exhibit 4 estimates the annual burden hour impacts (i.e., savings) to these respondents under the existing RCRA requirements.

6(b) Estimating Respondent Costs

Exhibit 1 estimates annual costs to private sector organizations under the proposed rule. Exhibit 2 estimates annual costs to state governments under the proposed rule. Exhibit 3 presents the total annual cost to the private sector and state governments under the proposed rule. Exhibit 4 estimates the annual cost impacts (i.e., savings) to these respondents under the existing RCRA requirements. Specific cost assumptions are discussed below.

(i) Estimating Labor Costs

Private Sector Organizations

EPA estimates an average loaded hourly labor rate for private sector organizations of \$101.13 for legal staff, \$77.67 for managerial staff, \$110.99 for technical staff, and \$25.06 for clerical staff. To derive these rates, EPA obtained mean (unloaded) average hourly labor rates from the "Occupational Employment Statistics, May 2009 National Occupational Employment and Wage Estimates, United States" of the U.S. Bureau of Labor Statistics (BLS) and from surveys of oil and gas professionals performed by the American Association of Petroleum Geologists (AAPG) and the Society of Petroleum Engineers (SPE). Table 2 identifies the occupations whose labor rates were used in this ICR for each labor category as well as the source of the rates. Note that the technical labor rate is an average of petroleum geologists and petroleum engineers.

EPA then updated the rates to 2010 levels using the BLS Employment Cost Index. Finally, EPA applied a 1.6 loading factor to reflect overhead (loading factor recommended in EPA's ICR Handbook).

Table 2. Occupation Title and Codes by Labor Category --Private Sector Organizations

Labor Category	Occupation	Source
Legal	Lawyers	Bureau of Labor Statistics
Managerial	Managers, All Others	Bureau of Labor Statistics
	Petroleum Geologists	AAPG Salary Survey
Technical	Petroleum Engineers, Reservoirs	SPE Salary Survey
Clerical	Office and Administrative Support, All Others	Bureau of Labor Statistics

State Governments

EPA estimates an average loaded respondent hourly labor rate for state governments of \$64.86 for legal staff, \$61.50 for managerial staff, \$38.53 for technical staff, and \$26.74 for clerical staff. To derive these rates, EPA obtained mean (unloaded) average hourly labor rates from the "May 2009 National Industry-Specific Occupational Employment and Wage Estimates, NAICS 999200 – State Government" of the Bureau of Labor Statistics (BLS). Table 3 identifies the occupations whose labor rates were used in this ICR for each labor category as well as the source of the rates.

EPA then updated these rates to June 2010 levels using the BLS Employment Cost Index. Finally, EPA applied a 1.6 loading factor to reflect overhead (loading factor recommended in EPA's ICR Handbook).

Table 3. Occupation Title and Codes by Labor Category – State Governments

Labor Category	Occupation	Source			
Legal	Lawyers	Bureau of Labor Statistics			
Managerial	Managers, All Others	Bureau of Labor Statistics			
Technical	Compliance Officers	Bureau of Labor Statistics			
Clerical	Office and Administrative	Duranu of Labor Statistics			
Ciericai	Support, All Others	Bureau of Labor Statistics			

(ii) Estimating Capital and Operations and Maintenance (O&M) Costs

Operation and maintenance (O&M) costs are those costs associated with a paperwork requirement incurred continually over the life of the ICR. They are defined by the Paperwork Reduction Act of 1995 as the recurring dollar amount of costs associated with O&M or purchasing services. This ICR includes postage costs for generators and Class VI UIC well owner/operators to mail the certification to EPA or the state (i.e., \$0.44/letter). There is no capital costs associated with the information collections.

6(c) Estimating Agency Hours and Costs

EPA estimates an average loaded hourly labor rate of \$76.38 for legal staff, \$71.42 for managerial staff, \$52.37 for technical staff, and \$21.02 for clerical staff. To derive these rates, EPA obtained unloaded federal government hourly rates from the 2010 GS pay schedule available from the Office of Personnel Management.⁵ The labor rates are based on the following GS levels and steps: legal labor rates were based on GS Level 15, Step 1, managerial labor rates were based on GS Level 14, Step 4, technical labor rates were based on GS Level 12, Step 5, and clerical labor rates were based on GS Level 5, Step 1. EPA then multiplied the unloaded rates by the standard government loading factor of 1.6 to reflect overhead (loading factor recommended in EPA's ICR Handbook).

6(d) Estimating the Respondent Universe

In this section, EPA estimates the impacted universe and the annual burden to respondents under the rule's paperwork requirements. EPA then estimates the burden impacts (i.e., savings) to respondents for no longer complying with the existing RCRA paperwork standards for exempted CO₂ streams. Exhibits 1 through 4 calculate respondent burden.

PROPOSED PAPERWORK REQUIREMENTS

(1) Private Sector Organizations

Table 4 presents that annual number of generators and Class VI UIC well owner/operators that are estimated to claim the exemption and prepare the certification statement

⁵ See the web site: http://www.opm.gov/oca/10tables/pdf/gs_h.pdf.

during the three-year period of this ICR. These estimates reflect the number of generators and Class VI UIC well owner/operators that are expected to begin capture and sequestration activities from 2012 through 2014 as presented in the economic assessment for this rulemaking.⁶

As shown in the table, EPA estimates that 2 generators and 1 Class VI UIC well owner/operator would prepare the certification statement at 40 CFR 261.4(h) on average annually during the three-year period of this ICR. In total, this equates to 3 respondents on average annually.

For purposes of this ICR, EPA expects that legal, managerial, and technical personnel at each generator site and UIC well facility would read the regulations before claiming the exemption. EPA has used its best professional judgment to estimate that it would take 45 minutes per respondent to read the regulations at section 261.4(h) for purposes of discussing the requirement to prepare the certification statement.

In addition, EPA believes these personnel would review relevant documentation and discuss the exemption's paperwork requirements. A clerical person would type up the certification statement and a manager would sign and keep it onsite. EPA has used its best professional judgment to estimate that these activities would take 4 hours per respondent.

Table 4. Annual Number of Generators and Class VI UIC Well Owner/Operators Claiming the Exemption During Three-Year Period of ICR^a

Ciuiiiii	5 the Latin	puon During	I III ee- I eai Pei	100 01 101							
		Years		Three-							
Facility Type	1 2		3	Total	Year Average ^b						
Claiming Exemption/Preparing Certification											
Generators	4	1	0	5	2						
Class VI UIC Well	2	1	1	4	1						
Owner/Operators	2	1	1	4	1						
Sub-Total	6	2	1	9	3						
Renewing Certification An	nually										
Generators	0	4	5	9	3						
Class VI UIC Well	0	2	2	F	3						
Owner/Operators	0	2	3	5	2						
Sub-Total	0	6	8	14	5						
Grand Total	6	8	9	23	8						

^a Estimates are taken from the economic assessment titled, "Assessment of the Potential Costs, Benefits, and Other Impacts of the Conditional Exemption from the RCRA Definition of Hazardous Waste for CO₂ Streams Managed in UIC Class VI Wells for the Purposes of Geologic Sequestration, as Proposed." See Exhibits 5 and 9.

Table 4 also presents that annual number of generators and Class VI UIC well

b Three-year averages may include rounding.

⁶ The economic assessment is titled, "Assessment of the Potential Costs, Benefits, and Other Impacts of the Conditional Exemption from the RCRA Definition of Hazardous Waste for CO₂ Streams Managed in UIC Class VI Wells for the Purposes of Geologic Sequestration, as Proposed." See Exhibits 5 and 9 for the number of generators and Class VI UIC wells estimated to begin and practice sequestration by year.

owner/operators that are estimated to renew their certification statement during the three-year period of this ICR. The number of respondents expected to renew their certification statement each year is equal to the cumulative number of respondents that have claimed the exemption in all prior years.

As shown in the table, EPA estimates that 3 generators and 2 Class VI UIC well owner/operators would renew the certification on average annually during the three-year period of this ICR. In total, this equates to 5 respondents on average annually. EPA used its best professional judgment to estimate that it would take 2 hours for each respondent to renew its certification statement annually.

Finally, EPA estimates that there would be 6 generators and Class VI UIC owner/operators under the exemption by the end of the first year, 8 by the end of the second, and 9 by the end of the third. Hence, EPA estimates that, on average, there would be 8 respondents on average during the ICR's three-year period (i.e., $((6+8+9)/3 \approx 8))$). Based on its best professional judgment, EPA expects that, each year, 30 percent of them would be asked to submit their certifications to EPA or state (2 submittals/yr). EPA used its best professional judgment to estimate that 90% would be sent to authorized states (i.e., 2/yr) and 10% to EPA.

These estimates are reflected in Exhibit 1.

(2) State Governments

EPA has used its best professional judgment to estimate that state governments would prepare and transmit 2 requests to generators and Class VI well owner/operators for their signed certifications annually. The state governments then would receive, review and file them. In addition, EPA has used its best professional judgment to estimate that state governments would take 1 hour to prepare a letter requesting a certification statement and 30 minutes to receive, review and file the certification after receipt. These estimates are reflected in Exhibit 2.

(3) Total Respondent Burden under Proposed Paperwork Requirements

Exhibit 3 presents the total annual burden to private sector and state government respondents under the new paperwork requirements. It shows that these respondents are estimated to incur approximately 27 hours and \$2,287 annually.

EXISTING PAPERWORK REQUIREMENTS

Generators and Class VI UIC well owner/operators claiming the exemption would not be subject to existing RCRA information collection requirements in handling the exempted CO_2 streams. As a result, these entities would see some burden savings under the existing RCRA paperwork requirements.

Exhibit 4 presents the total annual burden under the proposed rule's paperwork requirements, the annual burden savings under the existing paperwork requirements, and the net savings. Exhibit 4 presents the savings under the existing requirements according to the approved ICR in which the requirements are addressed. Below is a brief discussion of these ICRs, along with a description of relevant capital and O&M costs affected:

Hazardous Waste Generator Standards (EPA ICR Number 820). EPA estimates that
utilities and other plants that begin capturing hazardous waste CO₂ would change in
generator status from conditionally exempt small quantity generators (CESQGs) to large
quantity generators (LQGs) under the existing hazardous waste regulations. As LQGs,
they would be subject to RCRA paperwork requirements related to hazardous waste
determinations, contingency planning, and personnel training.

Under the conditional exemption, EPA estimates that they would remain CESQGs, be exempt from these paperwork requirements, and therefore see a burden savings. There would not be capital cost savings. There would be annual savings in O&M costs of \$9. These savings are associated with the photocopying and transmittal of fewer records.

• Notification of Regulated Waste Activity and 2009 Hazardous Waste Report (EPA ICR Number 976). EPA estimates that, under the existing hazardous waste regulations, utilities and other plants that capture hazardous waste CO₂ would change in generator status from CESQGs to LQGs and be required to submit a new or revised Site Identification (ID) Form to EPA indicating this change. As LQGs they also must prepare and submit a Hazardous Waste Report biennially, including a Site ID Form and Form GM. Under the conditional exemption, they would be relieved of these requirements and therefore see a burden savings.

It is also assumed that, under the existing hazardous waste regulations, UIC wells that receive the CO₂ for injection (e.g., a Class I UIC well that also meets Class VI requirements) would need to submit a Site ID Form to notify EPA that they are subject to RCRA. They also would need to prepare and submit a Hazardous Waste Report biennially, including a Site ID Form and Form WRs. Under the conditional exemption, they would be relieved of these requirements and therefore see a burden savings.

There would not be capital cost savings. There would be annual savings in O&M costs of about \$28. These savings are associated with the transmittal and recordkeeping of fewer forms.

• Land Disposal Restrictions ICR (EPA ICR Number 1442). EPA estimates that, under the existing hazardous waste regulations, utilities and other plants that capture CO₂ would be required to determine if it is RCRA hazardous and keep records of this determination. Under the conditional exemption, they would be relieved of these requirements and

⁷ Note that the Generator Standards ICR does not estimate the burden associated with generator hazardous waste determinations. Such burden is estimated in the Land Disposal Restrictions ICR, 1442.

therefore see a burden savings. There would not be capital cost savings. There would be annual savings in O&M costs of \$4,608.⁸ These savings are associated with no longer paying laboratory costs for hazardous waste determinations.

⁸ ICR 1442 estimates approximately \$2,000 in laboratory fees per generator waste determination. The ICR estimates that 50% of generators pay this fee and the other 50% use generator knowledge. This differs from the Economic

Assessment prepared for the proposed RCRA CO₂ rule. The EA's estimates are based on a more detailed analysis of inputs specific to the proposed rulemaking.

EXHIBIT 1
CONDITIONAL EXEMPTION FOR CARBON DIOXIDE STREAMS IN GEOLOGIC SEQUESTRATION - PROPOSED RULE ESTIMATED ANNUAL PRIVATE SECTOR HOUR AND COST BURDEN*

	Hours and Costs per Respondent Activity								Total Hours and Costs		
INFORMATION COLLECTION ACTIVITY	Legal \$101.13/Hr	Manager \$77.67/Hr	Technical \$110.99/Hr	Clerical \$25.06/Hr	Respon. Hours/ Activity	Labor Cost/ Activity	Capital/ Startup Cost	O&M Cost/ Activity	Number of Respondents / Activities	Total Hours/ Year	Total Cost/ Year
READING THE REGULATIONS									•		
Read the regulations	0.25	0.25	0.25	0.00	0.75	\$72.45	\$0.00	\$0.00	3	2.25	\$217.35
Subtotal	0.25	0.25	0.25	0.00	0.75	\$72.45	\$0.00	\$0.00	3	2.25	\$217.35
SIGNED CERTIFICATION STATEMENT											
Generators and Class VI UIC Well Own	er/Operator	s									
Prepare the certification that is signed by the authorized representative and keep it											
onsite for no less than three years	1.00	1.50	1.25	0.25	4.00	\$362.64	\$0.00	\$0.00	3	12.00	\$1,087.92
Renew the certification every year the											
exemption is claimed	0.50	0.75	0.50	0.25	2.00	\$170.58	\$0.00	\$0.00	5	10.00	\$852.90
Make the certification statement available											
to EPA or state if requested	0.00	0.00	0.00	0.10	0.10	\$2.51	\$0.00	\$0.44	2	0.20	\$5.90
Subtotal	varies	varies	varies	varies	varies	varies	\$0.00	varies	varies	22.20	\$1,946.72
TOTAL	varies	varies	varies	varies	varies	varies	\$0.00	varies	varies	24.45	\$2,164.07

^{*} Exhibit contains rounding error.

EXHIBIT 2

CONDITIONAL EXEMPTION FOR CARBON DIOXIDE STREAMS IN GEOLOGIC SEQUESTRATION - PROPOSED RULE ESTIMATED ANNUAL STATE GOVERNMENT HOUR AND COST BURDEN*

		Hours and Costs per Respondent Activity									Costs
INFORMATION COLLECTION ACTIVITY	Legal \$64.86/Hr	Manager \$61.50/Hr	Technical \$38.53/Hr	Clerical \$26.74/Hr	Respon. Hours/ Activity	Labor Cost/ Activity	Capital/ Startup Cost	O&M Cost/ Activity	Number of Respondents / Activities	Total Hours/ Year	Total Cost/ Year
Prepare and transmit a written request for			-			,		1			
a copy of the signed certification	0.00	0.25	0.50	0.25	1.00	\$41.33	\$0.00	\$0.44	2	2.00	\$83.54
Receive, review and file the signed certifications	0.00	0.10	0.25	0.15	0.50	\$19.79	\$0.00	\$0.00	2	1.00	\$39.58
TOTAL	0.00	0.35	0.75	0.40	1.50	\$61.12	\$0.00	\$0.44	2	3.00	\$123.12

^{*} Exhibit contains rounding error.

EXHIBIT 3

CONDITIONAL EXEMPTION FOR CARBON DIOXIDE STREAMS IN GEOLOGIC SEQUESTRATION - PROPOSED RULE ESTIMATED ANNUAL PRIVATE SECTOR AND STATE GOVERNMENT HOUR AND COST BURDEN*

Type of Entity	Total Hours/Year	Total Labor Costs <i>l</i> Year	Total Capital and Startup Costs/ Year	Total O&M Costs/ Year	Total Costs/ Year
Private Sector	24.45	\$2,163.19	\$0.00	\$0.88	\$2,164.07
State Government	3.00	\$122.24	\$0.00	\$0.88	\$123.12
Total	27.45	\$2,285.43	\$0.00	\$1.76	\$2,287.19

^{*} Exhibit contains rounding error.

EXHIBIT 4

CONDITIONAL EXEMPTION FOR CARBON DIOXIDE STREAMS IN GEOLOGIC SEQUESTRATION - PROPOSED RULE

ESTIMATED ANNUAL RESPONDENT HOUR AND COST BURDEN - PROPOSED AND EXISTING PAPERWORK REQUIREMENTS*

	ICR Number	Hours/Year	Labor Cost/Year	Capital Cost/Year	O&M Cost/Year	Total Cost/Year					
aperwork Requirements											
Proposed Paperwork Requirements											
Conditional Exemption for Carbon Dioxide Streams in Geologic Sequestration - Proposed Rule	2421.01	27.45	\$2,285.43	\$0.00	\$1.76	\$2,287.19					
Existing Paperwork Requirements			-								
Hazardous Waste Generator Standards	820	(24.00)	(\$815.40)	\$0.00	(\$9.00)	(\$824.40)					
Notification of Regulated Waste Activity and 2009 Hazardous Waste Report	976	(25.00)	(\$998.52)	\$0.00	(\$27.93)	(\$1,026.45)					
Land Disposal Restrictions ICR	1442	(54.00)	(\$2,038.50)	\$0.00	(\$4,608.00)	(\$6,646.50)					
Subtotal: Existing Paperw ork Requirement	(103.00)	(\$3,852.42)	\$0.00	(\$4,644.93)	(\$8,497.35)						
Total under the Proposed Rule: New and E	(75.55)	(\$1,566.99)	\$0.00	(\$4,643.17)	(\$6,210.16)						

^{*} Exhibit contains rounding error.

EXHIBIT 5
CONDITIONAL EXEMPTION FOR CARBON DIOXIDE STREAMS IN GEOLOGIC SEQUESTRATION - PROPOSED RULE ESTIMATED ANNUAL FEDERAL AGENCY HOUR AND COST BURDEN*

	Hours and Costs per Agency Activity							Total Hours and Costs			
	Legal	Manager	Technical	Clerical	Respon. Hours/	Labor Cost/	Capital/ Startup	O&M Cost/	Number of Respondents/	Total Hours/	Total Cost/
INFORMATION COLLECTION ACTIVITY	\$76.38/Hr	\$71.42/Hr	\$52.37/Hr	\$21.02/Hr	Activity	Activity	Cost	Activity	Activities	Year	Year
Prepare and transmit a written request											
for a copy of the signed certification	0.00	0.25	0.50	0.25	1.00	\$49.30	\$0.00	\$0.44	0	0.00	\$0.00
Receive, review and file the signed											
certifications	0.00	0.10	0.25	0.15	0.50	\$23.39	\$0.00	\$0.00	0	0.00	\$0.00
TOTAL	0.00	0.35	0.75	0.40	1.50	\$72.69	\$0.00	\$0.44	0	0.00	\$0.00

^{*} Exhibit contains rounding error.

6(e) Bottom Line Burden Hours and Cost Tables

(1) Respondent Tally

As shown in Exhibit 4, EPA estimates the total annual burden to respondents (i.e., the private sector and state governments) under the new paperwork requirements to be 27 hours and \$2,287. In addition, EPA estimates an annual burden savings under the existing paperwork requirements of 103 hours and \$8,497. This results in a net annual savings of 76 hours and \$6,210. The bottom-line burden savings over three years is estimated to be 228 hours and \$18,630.

(2) Agency Tally

As shown in Exhibit 5, EPA estimates the total annual burden to the Federal government under the new paperwork requirements to be 0 hours and \$0. The bottom-line burden over three years is estimated to be 0 hours and \$0.

6(f) Reasons for Change in Burden

EPA is taking this action to support its efforts to encourage the use of carbon capture and sequestration technologies to reduce the levels of greenhouse gases emitted to the atmosphere. EPA estimates that the minor incremental burden imposed by the new paperwork requirements would be more than offset by savings that respondents would experience under the existing paperwork requirements. At the same time, the paperwork requirements are necessary to hold generators and Class VI UIC well owner/operators accountable for their actions under the exemption and increase compliance rates.

6(g) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 3 hours per private-sector respondent. This includes time for reading the regulations, preparing the certification statement, renewing it annually, and submitting it to EPA or authorized state if requested. The annual public reporting and recordkeeping burden for this collection of information is estimated to average 1.5 hours per state government respondent. This includes time for preparing and mailing a letter asking for a generator or UIC well owner/operator to submit a signed certification statement, and then receiving, reviewing, and filing it after receipt.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection

of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-RCRA-2010-0695, which is available for online viewing at www.regulations.gov, or in person viewing at the RCRA Docket, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the RCRA Docket is (202) 566-0270. An electronic version of the public docket is available at www.regulations.gov. This site can be used to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. When in the system, select "search," then key in the Docket ID Number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, D.C. 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-RCRA-2010-0695 and OMB Control Number 2050-0053 in any correspondence.